

Historic, Archive Document

Do not assume content reflects current scientific knowledge, policies, or practices.

March 31, 1944

EXPORT BULK BAG PACKAGING SPECIFICATIONSSPECIFICATIONS FOR USE BY SUPPLIER OF PRODUCT

BAG SPEC. NO.	TYPES OF BAGS	PAGE
SPB-1	Single Textile Bag.....	2
	Multi-wall Paper Bag (5 Plies).....	2
	Multi-wall Paper Bag (6 Plies).....	2
SPB-2	Double Textile Bag.....	3
	Multi-wall Paper Bag (6 Plies).....	3
	Cotton Single Inner Bag Overslipped by Multi-wall Paper Bag (5 Plies).....	3
	Cotton Single Inner Bag Overslipped by Multi-wall Paper Bag (6 Plies).....	3
	Multi-wall Paper Inner Bag (5 Plies) Overslipped by Multi-wall (5 Plies).....	3
	Multi-wall Paper Inner Bag (6 Plies) Overslipped by Multi-wall (6 Plies).....	3
SPB-3	Single Textile Bag with Crinkled Paper Liner Bag, Non-Moisture Resistant.....	4
	Multi-wall Paper Bag (5 Plies).....	4
	Multi-wall Paper Bag (6 Plies).....	4
SPB-4	Single Textile Bag with Crinkled Paper Liner Bag, Moisture Resistant.....	5
	Multi-wall Paper Bag (5 Plies*).....	5
	Multi-wall Paper Bag (6 Plies*).....	5
SPB-5	Single Textile Bag with or without Crinkled Paper Liner Bag and Laminated Textile Outer Bag, Moisture Resistant.....	6
	Multi-wall Paper Bag (6 Plies**).....	6
	Cotton Single Inner Bag Overslipped by Multi-wall Paper Bag (5 Plies**).....	6
	Cotton Single Inner Bag Overslipped by Multi-wall Paper Bag (6 Plies**).....	6
	Multi-wall Paper Inner Bag (5 Plies) Overslipped by Multi-wall (5 Plies**)....	6
	Multi-wall Paper Inner Bag (5 Plies) Overslipped by Multi-wall (6 Plies**)....	6
	Multi-wall Paper Inner Bag (6 Plies) Overslipped by Multi-wall (6 Plies**)....	6
* - With One Ply Moisture Resistant.		
** - With Two Plies Moisture Resistant.		
General Specifications for Multi-wall Paper Bag.....		9 & 10
General Specifications for Textile Bags.....		7 & 8

The following export bag specifications shall be considered as minimum requirements, therefore, materials of pro rata or greater weight of the same type specified in announcements will be acceptable. Since bag specifications requested in announcements are based on destination of products, suppliers should make every effort to supply specified bags.

SPB-1

Single Textile & Multi-wall Paper Bags

SINGLE TEXTILE BAG

Capacity - 100#	
Item No.	Textile Fabric
TS-1	2.85 36" Sheeting
TS-2	2.50 40" Sheeting
TS-3	2.35 36" Osnaburg
TS-4	2.35 30" Osnaburg
TS-5	2.11 40" Osnaburg
TS-6	16 oz. seamless grain bag
TS-7	10 oz. Burlap
TS-8	10½ oz. Burlap
TS-9	12 oz. Burlap

T. S. - Textile Single

MULTI-WALL PAPER BAG

Commo- dity Class	Capacity Not More than 60#	Capacity Not More than 80#	Capacity Not More than 100#
Construction in Order From Inside to Outside			
A	5 Plies: 4/50; 1/60 W. S.	6 Plies: 5/50; 1/60 W. S.	6 Plies; 4/50; 1/60; 1/60 W. S.
B	6 Plies; 5/50; 1/60 W. S.	6 Plies; 4/50; 1/60; 1/60 W. S.	6 Plies; 5/60; 1/60 W. S.
C	-----	5 Plies; 4/50; 1/60	6 Plies; 5/50; 1/60

W. S. - Wet Strength

SPB-2

Double Textile & Multi-wall Paper BagsDOUBLE TEXTILE BAG

Capacity - 100#			
Item No.	Outer Bag Materials		Inner Bag Material
TD-1	2.85	36" Sheeting or 10 oz. Burlap	4.00 37" Sheeting or
TD-2	2.50	40" Sheeting or 10 oz. Burlap	3.75 40" or 4.25 40" Sheeting
TD-3	2.35	36" Osnaburg or 10 oz. Burlap	4.00 37" Sheeting
TD-4	2.35	30" Osnaburg or 10 oz. Burlap	5.00 31" Sheeting
TD-5	2.11	40" Osnaburg or 10 oz. Burlap	3.75 40" or 4.25 40" Sheeting
TD-6	None		None
TD-7	2.35	30" Osnaburg or 10 oz. Burlap	2.35 30" Osnaburg

T.D. - Textile Double

MULTI-WALL PAPER BAG

Commodity Class	Capacity Not More than 60#	Capacity Not More than 80#	Capacity Not More than 100#
Construction in Order From Inside to Outside			
A	6 Plies; 4/50; 1/60; 1/60 W. S.	6 Plies; 2/50; 3/60; 1/60 W. S.	Inner Bag C.S.(Note 1) With Overslip 5 Plies; 4/50; 1/60 W. S. (FT)
			Inner Bag 5 Plies; 4/50; 1/60 W. S. with Overslip 5 Plies; 4/50; 1/60 W. S. (FT)
B	6 Plies; 2/50; 3/60; 1/60 W. S.	6 Plies; 5/60; 1/60 W. S.	Inner Bag C. S. (Note 1) With Overslip 6 Plies 4/50; 1/60; 1/60 W. S. (FT)
			Inner Bag 6 Plies; 5/50; 1/60 W. S. with Overslip 6 Plies; 4/50; 1/60; 1/60 W. S. (FT)

(FT) - Flat Tube

W. S.- Wet Strength

C. S.- Cotton Single

Note 1 - Inner Cotton Single: Shall be as specified under OUTER BAG MATERIAL in the double textile bag specification.

Single Textile Bag With Siftproof Non-Moisture Resistant
Crinkled Paper Liner Bag Inserted, and Multi-wall Paper Bags

Single Textile Bag With Siftproof Non-
Moisture Resistant Crinkled Paper Liner Bag Inserted

Capacity - 100#		
Item No.	Textile Fabric	Inner Siftproof Non-Moisture-Resistant Crinkled Paper Liner Bag
TPL-1	2.85 36" Sheeting or 10 oz. Burlap	Materials - 100% Sulphate Kraft of Standard brown color, basis wt. 24x36/500 (before crinkling or processing), or either: <u>Grade 1</u> - One way stretch, 45# minimum basis weight, with minimum 15% wax by Weight added, with 30% minimum stretch in one direction. <u>Grade 2</u> - All directional stretch, 30# minimum basis weight, with minimum 15% of wax by weight added, 30% minimum stretch in each direction.
TPL-2	2.50 40" Sheeting or 10 oz. Burlap	
TPL-3	2.35 36" Osnaburg or 10 oz. Burlap	
TPL-4	2.35 30" Osnaburg or 10 oz. Burlap	
TPL-5	2.11 40" Osnaburg or 10 oz. Burlap	
TPL-6	16 oz. seamless grain bag	

TPL - Textile Paper Liner

MULTI-WALL PAPER BAG

Commodity Class	Capacity Not More than 60#	Capacity Not More than 80#	Capacity Not More than 100#
Construction in Order From Inside to Outside			
A	5 Plies; 4/50; 1/60 W. S.	6 Plies; 5/50; 1/60 W. S.	6 Plies; 4/50; 1/60; 1/60 W. S.
B	6 Plies; 5/50; 1/60 W. S.	6 Plies; 4/50; 1/60; 1/60 W. S.	6 Plies; 5/60; 1/60 W. S.
C	-----	5 Plies; 4/50; 1/60;	6 Plies; 5/50; 1/60;

W. S. - Wet Strength

Single Textile Bag With Siftproof Moisture-Resistant
Duplex Crinkled Paper Liner Bag Inserted, and Multi-wall Paper Bags

SINGLE TEXTILE BAG WITH SIFTPROOF MOISTURE-RESISTANT
DUPLEX CRINKLED PAPER LINER BAG INSERTED

Capacity - 100#		
Item No.	Textile Fabric	Siftproof Moisture-Resistant Duplex Crinkled Paper Liner Bag
TPLM-1	2.85 36" Sheeting or 10 oz. Burlap	<p>Materials: 100% Sulphate Kraft of standard Brown color, basis wt. 24x36/500 (before crinkling or processing) or either grade described below.</p> <p>Lamination: 2 sheets of 30# minimum basis wt. are to be adhered together with Minimum of 30# basis wt. of bag manufacturing asphalt, applied in a uniform and continuous film between layers to be laminated.</p> <p><u>Grade 1</u>: One way stretch laminated sheets to be crinkled with 30% minimum stretch in one direction.</p> <p><u>Grade 2</u>: All direction stretch laminated sheets to be crinkled with 25% minimum stretch in each direction.</p>
TPLM-2	2.50 40" Sheeting or 10 oz. Burlap	
TPLM-3	2.35 36" Osnaburg or 10 oz. Burlap	
TPLM-4	2.35 30" Osnaburg or 10 oz. Burlap	
TPLM-5	2.11 40" Osnaburg or 10 oz. Burlap	
TPLM-6	16 oz. seamless grain bag	

TPLM - Textile Paper Liner Moisture-Proof

MULTI-WALL PAPER BAG

Commodity Class	Capacity Not More than 60#	Capacity Not More than 80#	Capacity Not More than 100#
Construction in Order From Inside to Outside			
A	5 Plies; 1/50; 1/AL; 1/50; 1/60; 1/60 W. S.	6 Plies; 1/50; 1/AL; 3/50; 1/60 W. S.	6 Plies; 1/50; 1/AL; 2/50; 1/60; 1/60 W. S.
B	6 Plies; 1/50; 1/AL; 3/50; 1/60; W. S.	6 Plies; 1/50; 1/AL; 2/50; 1/60; 1/60; W. S.	6 Plies; 1/60; 1/AL; 3/60; 1/60; W. S.

A.L. - Asphalt Laminated

W.S. - Wet Strength

Single Textile Bag, with or without Crinkled Paper Liner Bag, Overpacked
With Moisture-Resistant Laminated Textile Bag, & Multiwall Paper Bags

SINGLE TEXTILE BAG, WITH OR WITHOUT CRINKLED PAPER LINER
BAG, OVERPACKED WITH MOISTURE-RESISTANT LAMINATED TEXTILE BAG

			Capacity - 100#
em No.	Textile Fabric	Laminated Textile Bag	
O-1	2.85 36" Sheeting or 10 oz. Burlap	Material - To each side of 2.85 36" or 2.50 40" Sheeting, or 2.85 36", 2.35 36" or 2.11 40" Osnaburgs, or 10 oz. burlap shall be adhered with 85# basis wt. of bag manufacturing asphalt of consistency per accepted commercial practice, a sheet of 30# basis wt. (24x36/500) 100% Sulphate Kraft Paper, standard brown color, crinkled so as to provide 30% stretch in one direction or not less than total of 30% stretch in any two directions.	
O-2	2.50 40" Sheeting or 10 oz. Burlap		
O-3	2.35 36" Osnaburg or 10 oz. Burlap		
O-4	2.35 30" Osnaburg or 10 oz. Burlap		
O-5	2.11 40" Osnaburg or 10 oz. Burlap		
O-6	16 oz. seamless grain bag		

te 1 - Combination: When a Single Textile Bag is combined with Crinkled Paper Liner Bag to be overpacked with laminated Textile Bag, the total combination of bags, from inside to outside, shall be: Crinkled Paper Liner Bag; Single Textile Bag; and Laminated Textile Bag.

te 2 - Crinkled Paper Liner Bag: Refer to SPB-3

O - Textile Laminated Outer

MULTIWALL PAPER BAG

ommodity Class	Capacity Not More than 60#	Capacity Not More than 80#	Capacity Not More than 100#
Construction in Order From Inside to Outside			
A	6 Plies; 1/50; 1/AL; 1/60; 1/AL; 2/60 W.S. (*)	Inner Bag C.S. *(Note 1) Overslip 5 Plies; 1/50; 1/AL; 1/50; 1/AL; 1/60 W.S. (FT*)	Inner Bag C.S. *(Note 1) With Overslip 6 Plies 1/50; 1/AL; 1/50; 1/AL; 2/60 W.S. (FT*)
		Inner Bag 5 Plies; 4/50; 1/60 W. S. with Overslip 5 Plies; 1/50; 1/AL; 1/50; 1/AL; 1/60 W. S. (FT*)	Inner Bag 5 Plies; 4/50; 1/60 W. S. with Overslip 6 Plies; 1/50; 1/AL; 1/50; 1/AL; 2/60 W. S. (FT*)
B	Inner Bag C. S. *(Note 1) Overslip 5 Plies 1/50; 1/AL; 1/50; 1/AL; 1/60 W. S. (FT*)	Inner Bag C. S. *(Note 1) with Over- slip 6 Plies; 1/50; 1/AL; 1/50; 1/AL; 2/60 W. S. (FT*)	Inner Bag C. S. *(Note 1) with Overslip 6 Plies; 1/50; 1/AL; 1/50; 1/AL; 2/60 W. S. (FT*)
	Inner Bag 5 Plies; 4/50; 1/60 W.S. with Overslip 5 Plies; 1/50; 1/AL; 1/50; 1/AL; 1/60 W. S. (FT*)	Inner Bag 5 Plies; 4/50; 1/60 W. S. with Overslip 6 Plies; 1/50; 1/AL; 1/50; 1/AL; 2/60 W. S. (FT*)	Inner Bag 6 Plies; 5/50; 1/60 W. S. with Overslip 6 Plies; 1/50; 1/AL; 1/50; 1/AL; 2/60 W. S. (FT*)

A. L. - Asphalt Laminated

(*) - Wax Dipped

W. S. - Wet Strengtn (FT) - Flat Tube

(FT*) - Flat Tube Wax Dipped

*(Note 1) - Inner Cotton Single: Shall be the textile fabric bag specified under the Textile Bag Specifications.

EXPORT PACKAGING SPECIFICATIONS

TEXTILE BAGS - Cotton fabric strengths shall conform with WPB L-99 and amendments.

A - ALTERNATE FABRICS

A-1 - Materials listed in the foregoing textile specifications shall be considered as minimum requirements. Materials in other widths of pro rata or greater weight of the same type are acceptable.

B - CONSTRUCTION

B-1 - Textile Bags.

- (a) Cotton Seams: Bags shall be manufactured with bag seams sufficiently strong so as not to fail before the cloth when tension is applied across the seam. Flat seams may be used in which stitching is 1/2 inch from the edge of the cotton cloth.
- (b) Burlap Seams: Bags shall be manufactured with bag seams sufficiently strong so as not to fail before the cloth when tension is applied across the seam. Selvaged edges shall be sewn with flat seams only. Raw edges shall be sewn with Export seams only.
- (c) Nesting: Where an inner textile bag is used, the inner bag shall be turned and inserted in the outer bag before filling.

B-2 - Crinkled Paper Bag Liner and Duplex Paper Bag Liner.

- (a) Seams: Bag seams shall be sewn in accordance with standard commercial practice.
- (b) Size: Liner bag shall be made so that it will be at least 3 inches longer than the outer textile bag into which it is to be inserted.
- (c) Nesting: Liner bag shall be inserted in outer textile bag before filling.

B-3 - Laminated Textile Bag.

- (a) Seams: Bag shall be manufactured with single turned-over seams not less than 1/2 inch wide. Sewing shall not be more than 3-1/2 stitches per inch with 6/10 cotton thread in the needle and 5/10 cotton thread in the looper.
- (b) Seams: After sewing, all seams shall be wax dipped in 100% amorphous dipping wax or equivalent.
- (c) Seam Alternates: Other methods of making the seams and treating, which will provide equivalent strength and water resistance, are acceptable.
- (d) Size: Outer Laminated textile bag shall be 3 inches greater in circumference than the inner textile bag.

C - METHODS OF CLOSURE

C-1 - Thread: Good commercial quality thread shall be used and seams shall be sufficiently strong so as not to fail before the cloth when tension is applied across the seam.

C-2 - Closure:

(a) Single Bags: Bag shall be closed after filling by sewing along the line not less than one inch from the top of the cloth parallel to the top.

(b) Double Textile Bags: Combined outer and inner bags shall be closed together after filling by sewing along the line not less than one inch from the top of the cloth parallel to the top.

(c) Single Bag with Non-Moisture-Resistant Crinkled Paper Liner and Moisture-Resistant Crinkled Paper Liner:

1 - After combined bag is filled, the duplex crinkled liner paper liner bag shall be closed first as follows:

a - Bring top edges together.

b - Fold down with minimum of 3 flat folds snugly against top of contents.

c - Turn corners in under fold.

2 - After folding down duplex crinkled paper liner bag the outer textile bag shall be closed by sewing along the line not less than one inch from the top of the cloth parallel to the top.

(d) Single bag with or without Crinkled Paper Liner Bag overpacked with Moisture-Resistant Laminated Textile Bag:

1 - Insertion: Textile Bag may be inserted into Laminated Textile Bag before filling, or it may be filled and then inserted into Laminated Textile Bag, bottom down with sides adjacent to sides of Laminated Textile Bag.

2 - Inner Bag: Textile Bag shall be closed first by sewing along the line not less than one inch from the top of the cloth parallel to the top.

3 - Crinkled paper bag, if used, shall be closed as given under closure for crinkled or duplex liner bag.

4 - Laminated textile bag shall then be closed as follows: Draw the edges of the bag together with edges flat and even; then sew with not less than 6/12 cotton thread in the needle and 5/12 cotton thread in the looper, with standard filler or reinforcing cord. The sewing shall be between 2-1/2 and 3-1/2 stitches per inch. After closure is complete the seams shall be dipped in molten 100% amorphous wax to a depth of 1/4 inch beyond the seam or treated by other approved means to prevent penetration of water.

- (e) General Note: Other methods of making seams and treating them to give equal strength and/or water resistance, are acceptable.

EXPORT PACKAGING SPECIFICATIONS

MULTI-WALL PAPER BAGS

A - TYPES

- A-1 - Kraft Paper Bags, five and six plies, Open Mouth or Valve Types.

B - MATERIAL

- B-1 - Natural Kraft Paper shall be of heavy duty shipping sack grade, having a bursting strength of not less than 90% of its basis weight (24x36/500) when tested in accordance with TAPPI T-403m36. The pH of the paper (TAPPI T-435m, cold extraction) shall be 7.0 plus or minus 0.5.
- B-2 - Asphalt Laminated Kraft Paper shall be made of the same grade as specified in B-1, each sheet having a basis weight of not less than 20 pounds, laminated with a uniform and continuous film of not less than 25# of asphalt per ream (24x36/500).
- B-3 - Wet Strength Kraft Paper of 60 pounds basis weight (24x36/500) shall have an average wet tensile strength of not less than 25% of its dry tensile breaking strength in either principal direction after immersion in water at room temperature for 24 hours.
- B-4 - Tuck-in-Sleeves shall be made of kraft paper of not less than 90# basis weight (24x36/500) and shall be provided in valve bags when used for packaging of all commodities, except those in Class C, unless otherwise specified in the announcement.
- B-5 - Adhesives, in the case of bags having wax treated ends, shall be sufficiently waterproof so that the joint remains firm after immersion in water, at room temperature, for 24 hours.
- B-6 - Wax used for dipping or sealing ends of bags shall be a combination including not less than 75% amorphous wax, the remainder being paraffin or other suitable wax so that mixture has a melting point (ASTM D-127-30) of not less than 140°F.

C - CONSTRUCTION

- C-1 - Longitudinal Seams of each ply of the bags shall be not less than one inch wide and shall be continuously and securely adhered. Seams in successive walls shall be staggered approximately one inch.
- C-2 - Sewed Ends - Open Mouth and Valve Type Bags shall be made by bringing all the plies together and binding over the edge with a No. 1 kraft paper strip not less than 2-1/8 inch wide, having a basis weight of not less than 90# (24x36/500). The seam shall be sewn with not less than a 12/6 cotton needle thread and a 12/5 cotton looper thread with standard filler or reinforcing cords. The stitches shall average between 3.4 and 3.6 per inch and be located not less than 1/2 inch nor more than 3/4 inch from the end of the Bag.

C-3 - Satchel - or Pasted Bottom Open Mouth and Valve Type Bags shall have a 4-inch butt, having an overlap of not less than 2-1/2 inches. The pasted closures, including the slitter cuts, shall be continuously and securely adhered.

C-4 - Wax Dipped or Seal Ends When Specified.

- (a) Sewed Ends of bags, after sewing, shall be dipped in molten wax to a depth of at least 1/4 inch beyond the edges of the kraft strip on the bag body or treated by another approved waterproofing means.
- (b) Pasted Bottom Bags shall be constructed as in C-3 and then shall be sealed with wax (specified in B-6) or other approved means to prevent the penetration of water.

D - PACKING

D-1 - Closures of Bags After Filling.

- (a) The tops of all Open Mouth Multi-wall Paper Bags, after filling, shall be closed by sewing as specified in C-2.
- (b) Inner cloth bags, after filling, shall be closed by sewing along a line not less than one inch from the top of the cloth parallel to the top.

D-2 - Overslipping.

- (a) Inner cloth or inner Multi-wall Paper Bags shall be filled and closed by sewing before overslipping with Multi-wall Paper Bags.
- (b) Proper Size Ratio of Inner Cloth or Multi-wall Paper Bags.
The thickness of filled inner bag, when laid flat, shall not exceed 40 percent of its width in that position.
- (c) Size of Multi-wall Paper Bags for Overslipping Inner Cloth Bags.
The outer and inner bags shall be of proper relative sizes so that after packing with the required quantity of product, sufficient space is left to allow the inner cloth bag to conform with the shape of the outer paper bag during handling and stacking, without undue strain being placed on the outer paper bag. This may be secured by making the outer multi-wall paper bag three inches greater in circumference and two and one-half inches longer than the inner enclosed cloth bag.
- (d) Size of Multi-wall Paper Bags for Overslipping Inner Multi-wall Paper Bags. The outer multi-wall paper bag shall be two inches greater in circumference and two inches longer than the inner enclosed multi-wall paper bag.
- (e) Inserting Inner Bag. One filled inner cloth or multi-wall paper bag shall be packed into an outer multi-wall paper bag, with the bag manufacturer's closed end down and the side edges adjacent to the side edges of the outer bag.
- (f) Overslip Closure. After filling, the top closure of the outer multi-wall paper bag shall be sewn in the same way as specified in C-2.

